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TUTANKHAMEN.

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Atlas zur Altaegyptischen Kulturgeschichte

HANDBOOK TO THE HISTORY OF ANCIENT EGYPTIAN CULTURE

by

WALTER WRESZINSKI

In the preceding century, with the discovery and excavation in the valley of the Nile of treasures which had slumbered for thousands of years, their speedy revelation occupied the foreground of public interest. The abundant flow of material was published in voluminous

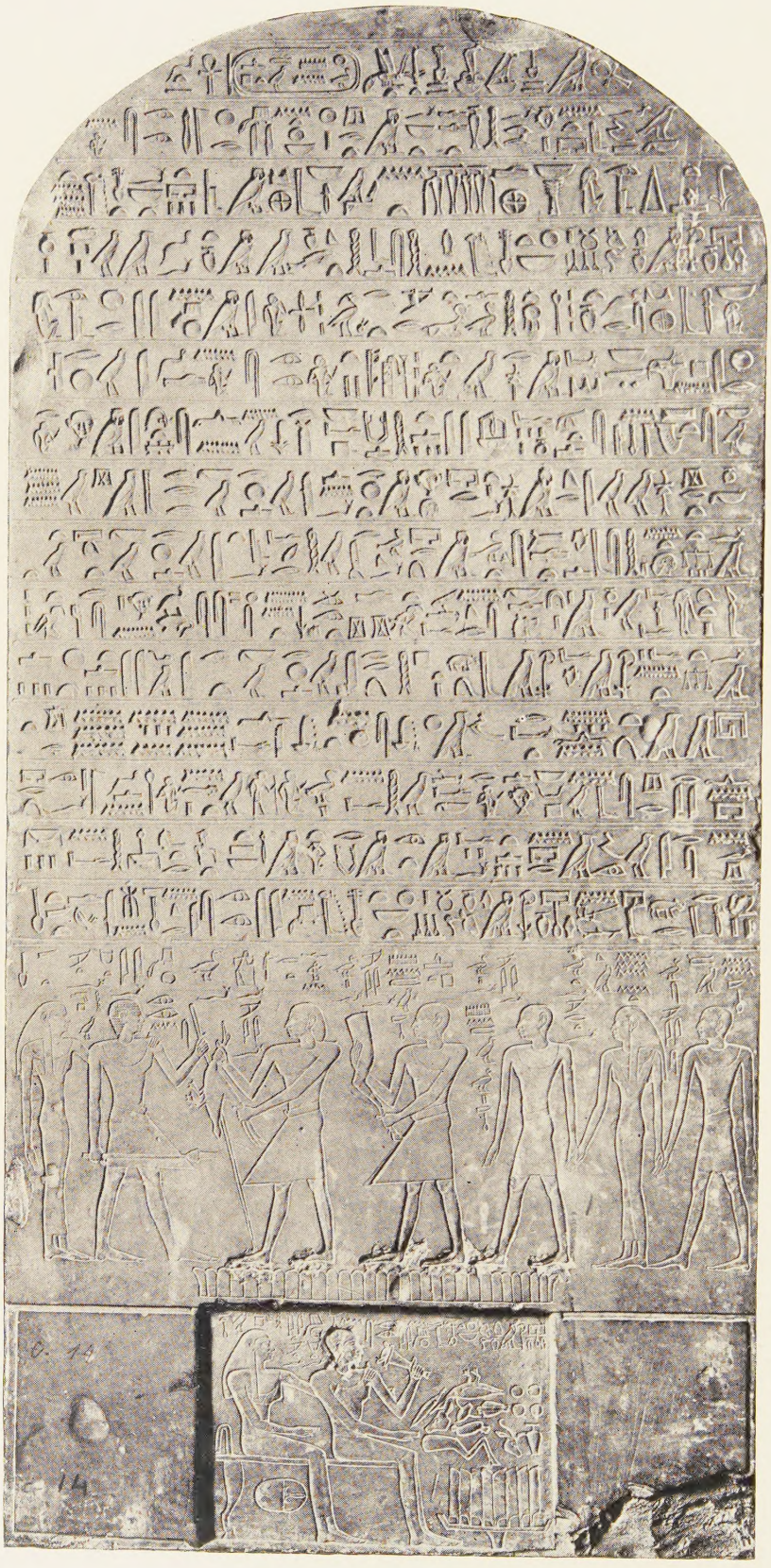


FIG. I. XITH DYNASTY, STELE OF SENIRUI, LOUVRE.

ANCIENT EGYPT.

THE STELE OF THE ARTIST.

C 14 OF THE LOUVRE.

THIS inscription has been studied by many scholars; the content is therefore well known, but there are two points on which I venture to offer some suggestions.

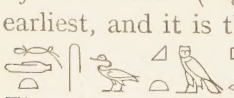
The stele (Fig. 1) is the inscription of a certain Sen-irui, who was essentially the skilled technician, as his titles show. He was the , "The overseer of the craftsmen, the artist-sculptor," and his chief boast was that he was "a craftsman excellent in his craft, supreme (lit., coming out on top) in his knowledge." He recounts the whole of that knowledge divided under four heads, each beginning with the words . The first gives his religious knowledge, *i.e.*, his acquaintance with the liturgy; the second, his scientific knowledge; the third, his artistic knowledge; and the fourth, his technical knowledge.

It is with the second of these sections that I propose to deal. I give the chief translations of these phrases. Maspero (*Trans. Soc. Bibl. Arch.*, V, p. 559): "I know what belongs to it, the sinking waters, the weighings done for the reckoning of accounts, how to produce the form of issuing forth and coming in so that a member go to its place." Madsen (*Sphinx*, XII, p. 248): "Je savais les règles de la peinture (?) et les poids des justes calculs . . . jusqu'à ce que le membre soit à sa place." Sottas (*Rec. de Trav.*, XXXVI, p. 154): "Je connais les formules de l'irrigation, les comptes de fournitures des exemples de calcul, les prélèvements et livraisons en entrées et sorties, de telle manière que tout corps animé vient à sa place." With all diffidence I would suggest a fairly literal translation: "I know the things which belong to the sinking of waters, the weighings of exact calculation, the cutting of that which enters and the coming out, it enters in order that a limb may come to its place."

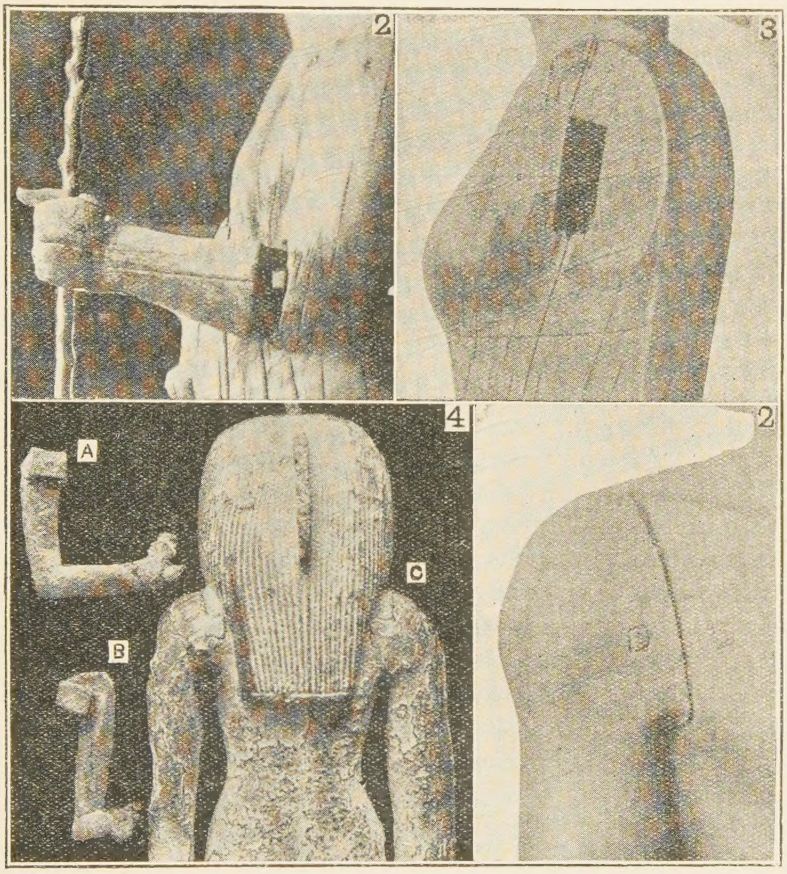
The whole inscription deals with Sen-irui's profession as an artist and technician, and this section describes that mathematical and scientific knowledge which made him supreme in his profession. There is nothing whatever to show that he was in any way concerned with the administration of the country, as must have been the case if M. Sottas' translation were correct, nor is there any reason to connect the "sinking waters" with the Inundation, for it is the rising and not the falling of the Nile which is all important for agriculture. If, therefore, this section refers to Sen-irui's special knowledge of his profession, it must have been something much higher than any which might have been shared by a

shrewd and observant peasant. Mr. Sloley's paper in ANCIENT EGYPT, 1924, (pp. 43–50) suggests very strongly that the "sinking waters" are a reference to water-clocks. Sen-irui's knowledge was obviously of a very high order, and a considerable knowledge of mathematics was required for the construction of water-clocks, in order to calculate the volume of water, and also for the scales necessary for the difference in the length of the hours in summer and in winter and the difference in the flow of water according to the seasonal temperature. As the early water-clocks in Egypt were of the outflow type, the "sinking waters" are thus explained.

If this explanation is accurate, the "weighings of exact calculation" will also admit of explanation. The determination of a volume of water is very conveniently carried out by weighings, since the volume is proportional to the mass (this principle was made use of by Galileo for time measurements). In one of the *Oxyrhynchus Papyri* (Vol. I, 470) there is an attempt to determine the volume of the "hourly" outflow from the vessel. First, the volume of the whole "12-hours" flow is calculated by a rather clumsy inexact formula, then the volume for each "hour" in turn. Borchardt (*Geschichte der Zeitmessung und Uhren*) figures sacred cubit-measures, on which the fractions are accompanied by names of months and the words "hours, filled with water." This evidently refers, as Borchardt observes, to observations connected with water-clocks. It seems clear, then, that Sen-irui records in these two phrases—"I know what belongs to the sinking waters, and the weighings of exact calculation"—that his knowledge of mathematics was so far beyond that of his fellows that he could make an accurate time-measure.

The third phrase of this section of the inscription has constituted a problem. Maspero regards it as having a mystically religious meaning; Madsen does not attempt a full translation; Sottas sees a reference to administrative work quite out of keeping with the rest of the inscription. It is the first part of the phrase which presents the whole difficulty, yet the second part, "in order that a limb may come to its place," offers the solution. Again, regarding Sen-irui as "a craftsman excellent in his craft, supreme in his knowledge," this phrase must refer to some complicated technical work. Diodorus (I, 98) gives the clue; he states that two brothers, Telekles and Theodorus, made a statue of Apollo between them, one working at Samos, the other at Ephesus, and that when the parts were assembled and put together the statue appeared to have been the work of but one man, so accurately had the work been done by measurement. Diodorus goes on to say that the making of composite statues "is practised especially among the Egyptians. For among them, the form of statues is not judged from the appearance to the eye, as among the Greeks." The artist, the chief of the craftsmen, who designed the statue, must have made accurate measurements as to the various parts, and as to where and how the pieces should fit together. Though the account given by Diodorus is a late one, composite statues made of several pieces and fitted together are known from the Old Kingdom onwards. This fitting was done either by pegs (Fig. 2), or by a mortise-and-tenon joint (Fig. 3), or by a dovetail (Fig. 4). The mortise-and-tenon appears, however, to be the earliest, and it is this form of fitting which I take to be described in the phrase  , "the cutting of the mortise (*śʿḳt-m*) and the tenon (*pri*)." Though I am not aware that such a word as *śʿḳt-m* exists in Egyptian, yet the combination of verb and preposition to form a noun is common in all languages,

and such a noun often has a technical meaning (*e.g.*, offset). I therefore suggest that *šʿḳt-m* is a technical word, like our own mortise; in which case *pri* must be the tenon which fits into the mortise. The word *šdt*, "to take or cut out," is used with the same spelling in the Pyramid Texts (W 511, Sethe, § 402*b*), ." He takes (or cuts) out for him that which is in their body." In the wooden statues of the Old Kingdom, the tenon, after being slipped into the mortise, is held in place by one or more wooden pegs, which, when sawn off close and covered with a thick coating of paint, would be practically invisible (Fig. 5). The pegged figures showed the join even less, as the pegs them



selves were hidden. The dovetail was much used for metal figures, and for fixing the arms. The dovetail was on the arm, the slot on the body of the figure, and both are actually part of the casting. In Fig. 4, A the dovetail was slipped in from above downwards, in Fig. 4, B, C, it is put in sideways. In these metal figures, the joint is so close and so accurately made that it is only visible on careful examination, and is easily missed by a careless observer. Here, then, it is evident that Sen-irui is again proud of his technical skill, that he could so calculate the measurements of a composite statue, with the positions and sizes of the mortises and tenons, that when put together the statue appeared to be made in one piece. When the tenon is put into the mortise, "it enters so that a limb comes to its place."

M. A. Murray.

THE GREAT PYRAMID COURSES.

When in Egypt last year, Mr. J. Tarrell, of Alexandria, kindly showed me a paper on an interesting question which he had been studying, and wished that it should be brought forward and discussed. This article is the result of the suggestion, along with some subsidiary matters. It had not previously been noted how the variations of the thickness of different courses of the Great Pyramid tended to group around certain lengths, and the enquiry hence arose, was this grouping due to different standards of measure used by the masons? or was it due to multiples of the usual Egyptian digit which were chosen so as to unify the thickness of each course?

We must picture to ourselves the actual conditions. It would require far longer labour to cut out and trim the stones to gauge, than to transport and fix them. Hence the cutting must have been started when the preliminary work was laid out, and must have continued during the ten years of preparations, before the twenty years of actual construction, according to the very likely statement of time by Herodotos. There must have been, therefore, about a third of the whole material, or nearly a million blocks, lying out at the quarries, covering hundreds of acres, before any building was begun. This would give opportunity to sort over the thicknesses, so as to avoid needless waste in trimming, and then the blocks which were most nearly of the same height would be finally dressed to correspond for one course.

Thus about 720 inches height of the pyramid (a third of the bulk) would be built from material of ten years' quarrying, and the remaining 5,050 inches (two-thirds) would be quarried during the twenty years of building. This brings to light an interesting explanation. It has been a puzzle hitherto, why the pyramid courses, a dozen times or more, start with a thick course, and then dwindle into several thinner courses until a big start again appears. From the base upward, the 667 inches of the first quarrying steadily diminish in course-height, until course 19 is reached, which starts a fresh series. The first batch of quarry stones lay out waiting; when the masons were ready to build they shifted the quarrymen over to another quarry, and began to pick and choose the blocks, so as to get enough of uniform size for a whole course, naturally beginning with the largest.

In the black block diagram (1) will be seen the courses of the pyramid as piled up, on a vertical scale of 1 : 800. The thickness of each course is represented by the length of the horizontal bar of that course, on a scale of 1 : 40. This enables the variation of course-height to be readily seen, and it is clear that repeatedly the building started again with thicker courses, which gradually tailed off to thin ones. It seems obvious that each such start on thicker blocks was the result of shifting to a fresh quarry field, where the picking over began, from the largest down to the smallest blocks, so as to obtain even courses. It would be impossible to let quarrymen dump fresh blocks, mixed up with those that were being gradually chosen, and sorted into groups for each course. The men would be turned on to a new quarry, or back into one of which the output was used up. We can thus trace apparently nineteen shifts of quarrying, each time taking a field of blocks, and selecting them in order of size. From this we can reckon roughly what labour each of the quarry fields represented ; starting with nine year's labour (or rather more, allowing for the unwieldiness of the blocks), the quarry groups worked at one place for about $5\frac{1}{2}$, 3, $3\frac{1}{2}$ down to only one year, and only a few months for the latter stages of the building.

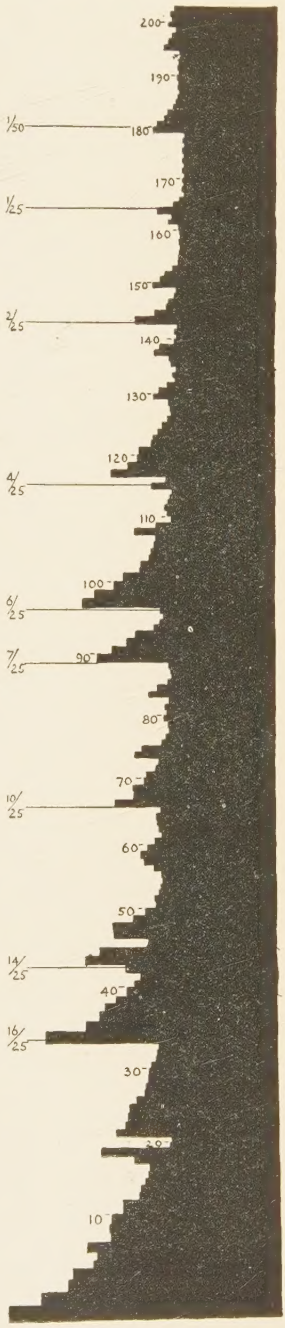


Diagram 1.

The use of a fresh field of blocks was started when definite stages of the pyramid size had been reached. The area of the square at different levels is marked down the left edge, the units of area being a square of one-fifth of the pyramid base, or one-twenty-fifth of that area (see *Pyramids and Temples of Gizeh,* p. 184, pl. viii).

With the working system thus before us, we may now examine the fluctuations in size of the courses, as Mr. Tarrell proposes. The second diagram here is divided into three portions for convenience of printing, but it runs on continuously and the results of the measured thickness of the courses is shown by the scale of inches beneath the curve. As the courses vary much in precision they cannot be merely added all together ; one course is the same to a tenth of an inch across the pyramid, another varies an inch or more. The only way to treat them is to give an equal area of the curve to each course ; thus the uncertain courses will spread out shallow, and the exact courses will rise up high. To do this, each tenth of an inch of variation of a course was weighted inversely as the extent of variation. This process gives the curve of the heights of the courses shown here.

At the beginning of the curve it is clear that many courses were intended to be a cubit thick, 20·6 inches ; there were also two courses of the double cubit of 41·2 inches (at the end of the curve). Between these we may see a digit measure used, numbered above the curve ; there is a peak at 50 digits ; another at 40, the

diagonal of the cubit. There may also be groups at 30, 32 (?), 34, 36 and 38 digits. Thus many of the sizes of courses can be accounted for on the usual digit scale, just as our masons might work up irregular stones by trimming to the next inch of size.

There are, however, some large exceptions, which give ground for Mr. Tarrell's view that local measures were used, perhaps by groups of foreign captive workmen, and that such measures may have survived in use to late times. The group at 21·3 inches is the mediaeval Nilometer cubit. The group at 22·2 inches is the double foot of Syria, known from the XIIth dynasty at Byblos, and found in monuments down to Roman times. The group at 22·8 inches, which is one of the largest, is the popular Egyptian measure of the country, the *dra'a beledy*. Another group close by it, at 23·2 inches, is the double Roman foot, which was an ancient measure in Etruria. As there are thus some strong suggestions of un-Egyptian measures, it is not unlikely that the large group at 26·3 inches is the double of the northern foot; a scale of this foot is known in the XIIth dynasty, and it was used down to Ptolemaic times, when a fine standard scale was made at Memphis. It was of northern origin, as it was the Germanic foot, and is the basis of English measures from the piling of Silbury Hill down to our present furlong and chain; it was also important in France. On the Egyptian standard cubits there is a cubit mark at 19 digits; this is clearly an independent measure, and here we see a good group at the double, 38 digits, or 28 inches, which is also the modern Turkish pik. Further on there is a group at 38·1 inches, which is the Persian arish.

It may be thought that one or two courses might be casual chance sizes; but as a single course consisted of 100,000 stones in the lower part, and 50,000 even at 50 courses up, it is certain that the size must have been not a mere whim, but a deliberate choice for thousands of men working a whole year. If they do not follow the Egyptian measure, some other definite standard must have been in use. Possibly some sizes adopted for convenience here may have originated the later measures.

It seems, then, that there is good ground for the proposal to see in these abnormal courses an early use of various strange units of measure, which were not officially recognised anciently, but which have survived in one form or another down to the present time.

J. Tarrell,
per F. Petrie.

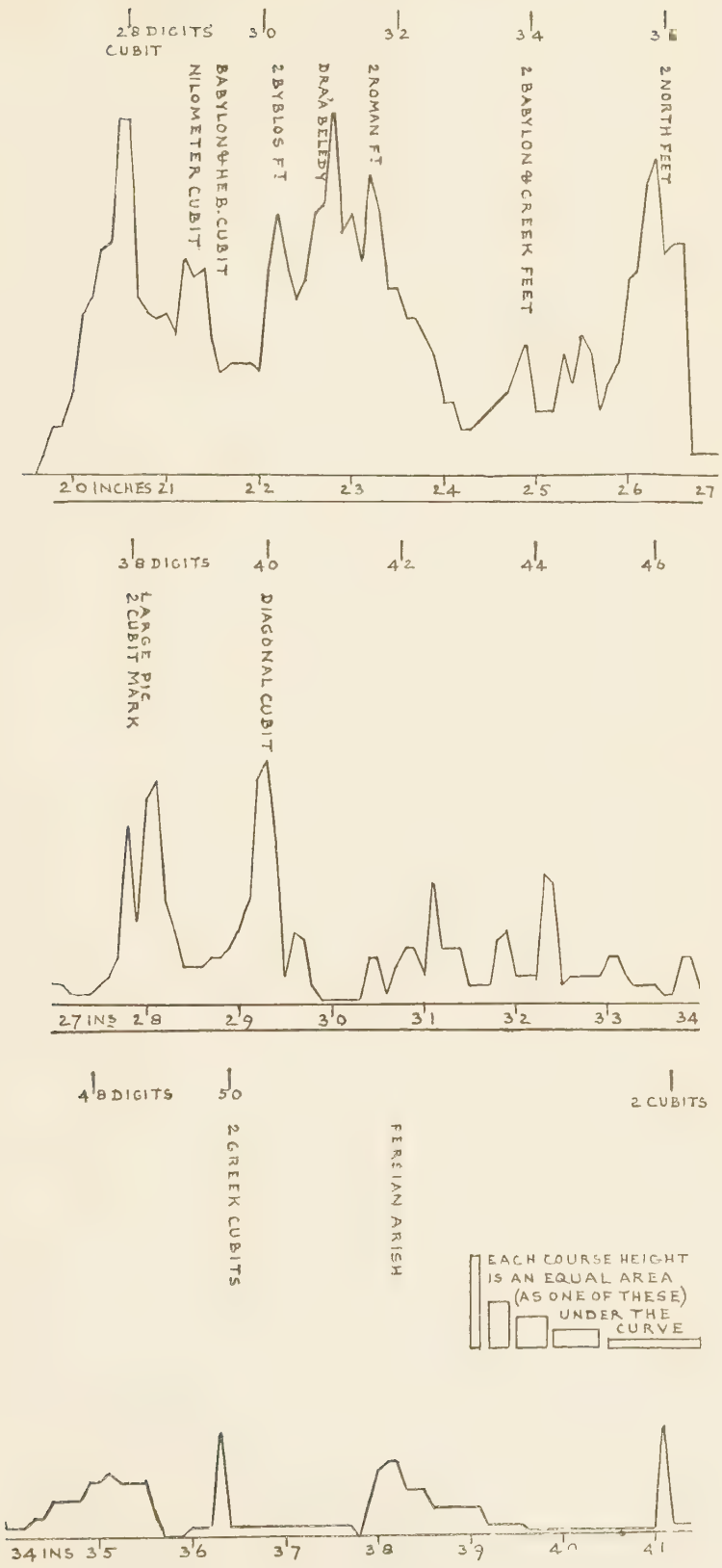


DIAGRAM 2. HEIGHT OF PYRAMID COURSES.

A TUT-ANKH-AMON PORTRAIT AT THE NY CARLSBERG GLYPTOTHEK.

At the large auction which took place on the 30th of April, 1890, in Paris, where M. R. Sabatier's private collections of Egyptian, Greek and Roman antiquities were scattered to the winds, the late Carl Jacobsen, Ph.D., the founder of the Ny Carlsberg Glyptothek, succeeded through the kind assistance of Dr. Sophus Müller, the former Director of the National Museum, in obtaining some statues which always will be considered as some of the greatest treasures of the Egyptian Department of the Glyptothek. Among these was a head, which, owing to its flat, cap-like crown, could easily be identified with the god Amon from Thebes, and it is also designated as such by M. G. Legrain in his catalogue of these auctions.[1]

Judging from the size of the head,[2] it must have belonged to a statue two metres high. The crown was at one time decorated with the long feathers which are typical of the god Amon, but unfortunately these are missing, as is also the back of the head. Further the tip of the nose has been broken off, and the chin and the right part of the lower lip is somewhat damaged. Of the left ear and the beard only very little remains. Apart from these damages, which, as far as the nose, mouth and chin are concerned, were restored in 1924 by Mr. Elo, the sculptor of the Glyptothek, the head is well preserved.

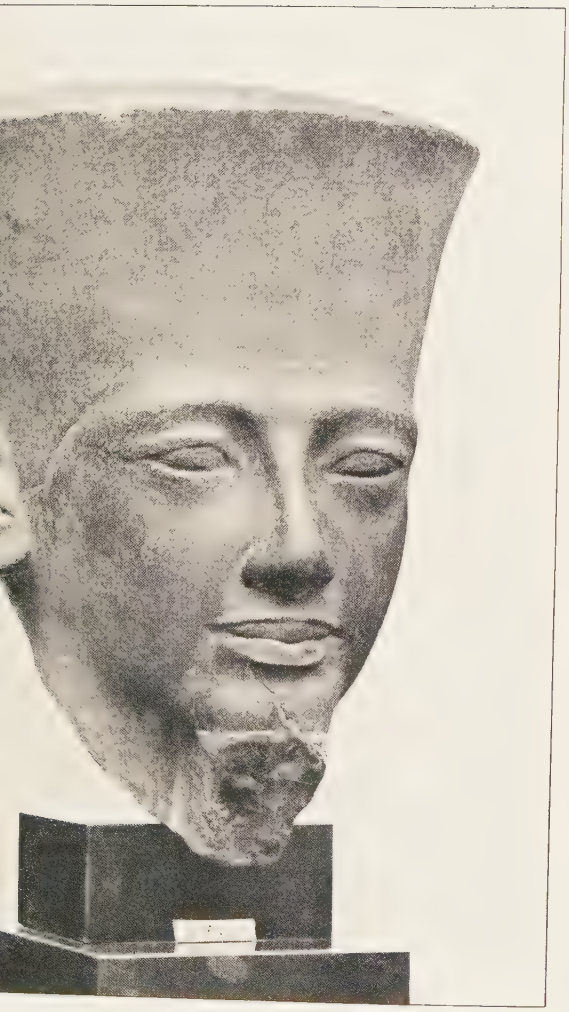
In comparing the head with the various famous Tut-Ankh-Amon statues found in different places, I have been struck with the likeness it bears to them. It has the same sloping forehead, the eye-balls are placed in their sockets in a naturalistic and life-like manner, thus producing—in spite of the weary look—an expression wonderfully alive in comparison with Egyptian art in general, where the eye never seems able to wink. The heavy cheeks have strong, high cheek-bones, but the narrow jaws, the hollowness round the eyes and nose, and the nose itself with its sharp almost emaciated bridge, and last, but not least, the tightly closed mouth, gives the face the delicate expression so characteristic of Tut-Ankh-Amon.

On the strength of these observations, I believe to be able to maintain that the Ny Carlsberg Glyptothek is in possession of a portrait of the Pharaoh who, during his short reign, was eager to reinstate the god Amon in the rights denied by king Amon-hotep IV. No wonder therefore that he again and again let his own likeness be reproduced in the Amon statues, which he erected to the honour of this god, and that he felt fully in his right when proudly calling himself " Tut-Ankh-Amon—the living picture of Amon."

Maria Mogensen.

[1] Collection Sabatier, No. 258 quat., p. 37.

[2] V. Schmidt; *Katalog over den aegyptiske Samling paa Ny Carlsb. Glyp.*, Nr. 61; S. 115.



HEAD OF AMEN-RA WITH FEATURES

OF TUTANKHAMEN. NY CARLSBERG.

STUDIES IN THE COPTIC PROPER NAMES.

Conservatism amongst the modern Egyptians, which is so very strongly marked in many different phases of their actual civilisation, is unfortunately failing in the question of proper names adopted by the Copts. In fact, one can very rightly say that the Copts never showed a greater tendency to change in any way or phase of their modes of life than in their proper names.

The object of a detailed study of proper names does not carry only a mere superficial interest, which ceases immediately the sense of the name is known. Proper names often elucidate, in their study, important historical facts. They show the degree of piety of their people, they point to the status of politics of the age during which they were used. They often give an insight into the degree of poetical imagination of their bearers. They often mark the rise and fall of certain religious and social movements, and of particularly distinguished personages. They may point out changes in the conception of numerous doctrines. They give clues to the situation and boundaries of extinct towns and villages, and thus help to the study of ancient geography. The classification of scientific deductions that might thus accrue from a detailed study of proper names is a subject by itself, and cannot be attempted except when sufficient data have been accumulated.

There is no doubt that natives have adopted deity-bearing (theophorous) names in the times when they were most fervent about their faith. The commonness of a proper name in a certain age usually means the appearance of a certain hero who bore that name and made it popular. He may have been a king, politician, prophet or any other leader. When a weaker community adopts the names of a stronger nation it means, though not invariably so, a subjugation of the former by the latter—indeed, imitation is the best proof of flattery. When religious names change in their form they usually mean a change in the conception of an old dogma. The innumerable proper names that show a relation to a town or a country often survive the place itself. Of this type we have the numerous names of European aristocracy which were inherited through generations, and remained until the very traces of the towns that gave them their names had disappeared. In this manner one can classify proper names in Egypt into the following classes :—

(1) Theophorous names, or those bearing the name of a deity.
(2) Geographical names, or those relating to the property of the bearer or the place of birth.
(3) The purely qualitative or adjectival names that denote a quality or some sort of virtue, most often non-existent, or a particular characteristic of the person, almost always exaggerated.
(4) Complex names.
(5) Obscure names, the origin and the sense of which is not known.

Names are like fashions. There are groups which are in vogue for one generation and then disappear, only to reappear some time afterwards. There are names which remain vulgar, only used by the lower classes, and almost entirely absent in the higher circles. Notice that this fact is particularly characteristic of the English people, whose rich classes keep their own names. In Egypt to-day the poorer classes, particularly the uneducated ones, find it difficult to adopt some of the highly resonant names of the gilded society.

In Egypt, names follow politics more than religion, in particular since the Mohammedan dominion, and even before that. During the height of the Roman rule, all Egyptians, even those of pure blood, began to copy Greek and Roman names.

When Christianity was introduced in the country a great many Greek names were adopted, and a still greater number of Biblical ones. Most of the ancient Egyptian names disappeared, but when the Church of Egypt was separated from the Church of Byzantium, after the Council of Chalcedon, the Copts returned to their old Egyptian names, and the number of Greek ones was perceptibly diminished.

During the earlier Moslem persecutions the Copts were not allowed to bear ambiguous names which did not show their creed; but in periods when the sultans were more clement to them they adopted names which carried an entirely Arabic stamp. The early papyri and ostraka, that date from the first Arab dynasty, show beyond any doubt that the Copts adopted such very Mohammedan names as 'Aly for a man and Fatmah for a woman. Soon afterwards they forebore. The names of certain prominent Copts that lived during the Fatimite period—the then rulers were of very good will towards them—sound like the names of great Mohammedan shêkhs. Indeed, the only name that was never adopted by them was the word Mohammed and its derivatives—Aḥmad, Hamid, Mahmud, Hāmăd, etc. Last of all, in our own days, with the changing phases of politics, we find people bearing really hybrid names. Turkish forms of Arabic names—adopted from their compatriots the Mohammedans—added to purely European names.

The influence of the American and English missionaries over the simple Upper Egyptian Copts has brought a further hybridism in our oriental nomenclature. We often meet with Kitchener, Wilson, Dickson, Allenby, William, Herbert, Alfred, Edward, Henry, Wolseley, and Lily, Daisy, Marjorie, Nelly, Katie, etc., etc., all very uncouthly added to purely Egyptian or even Arabic Mohammedan names—to wit, such as William Hosmy and Edward Fahmy.

From a historical point of view we can thus divide up names into groups that show very plainly the state of affairs during the period when they were used; such groups are as follows:—

1. During the early part of the Roman Period, before Christianity was proclaimed as the State religion, Egyptians used old Egyptian names. Very rarely, here and there, do we find a Roman or a Greek name added to an Egyptian. Here we derive our knowledge from the papyri, but mostly from the mummy-labels, which have been studied by Hall in the *P.S.B.A.*, XXVII, pp. 13 ff. I cannot concur in the opinion that the use of a Greek name means necessarily a Greek mixture of blood, and this can be judged from our own days. Egyptians had always the knack of adopting the names of foreigners, by way of fashion, and there is no need whatever to suspect a Greek origin or parentage for an Egyptian who bore a foreign name. Religion was no barrier to this, for we know that the Greeks readily worshipped the Egyptian gods, and Egyptians must have

adopted various other Greek customs ; but intermarriage could not have prevailed to a large extent, and I can prove this from the various anthropological researches on the bodies of that period. According to Hall, *loc. cit.*, the proportion of Greek names to Egyptian is one in four, and one in three. On the other hand, Egyptian names were borne by Greeks or people of Greek descent, and to base arguments on names alone is misleading. It was only about the third century, under Aurelius Caligula, that Egyptians were allowed to bear the names of the Emperors. Almost about the same time the second group of names began to be used.

2. With the advent of Christianity, which was brought in by the Greeks, the Egyptians who became Christians adopted at large, not only Greek and Roman names, but whole phrases and expressions from the Greek language, and forced them into their language, which they began to write in Greek letters. But we know of celebrated Coptic saints who bore foreign names, even before they became Christians. We have the great St. Antonius, and Paul before him, who were both of Egyptian origin and did not know a word of Greek. Amongst the innumerable lists of saints and martyrs we still meet with purely Egyptian pagan names which must have been very dear to the Egyptian, to wit, Harsiesis, Hôr, Petiesi, Harmin, Onnofri, Pakhôme, etc. Biblical names were very common, but not so common as later on. Indeed, towards the fifth and sixth centuries it was impossible to distinguish, by the names alone, the nationality of the bearer. Nevertheless, the various ostraka, papyri, etc., show that amongst the laity names of undoubted Egyptian origin were very common indeed.

3. With the advent of Islam, and after the Arab conquest of Egypt, things began to be changed. Early under the first dynasties of the new rulers there was no active persecution of the Copts, and they began to adopt Arab names (*see* above, and Crum, *Catalogue of Coptic MSS. in the British Museum*). Immediately the new conquerors began to persecute the Egyptians, they reverted to their old names ; but, still feeling the hatred of the Greeks, they adopted Biblical names.

4. Under the Fatimid dynasty the Copts saw better days, and a number of well-known personages have shone out. Besides some who occupied the highest posts in the Government, there were others who were great writers in law, philology, medicine, etc. ; those people adopted names of a purely Arabic stamp, and it must have been, first, the clemency of the rulers, and second, the fashion, that made them adopt these names. The best examples that we could give of this group of names is to cite one full name of one of the brothers 'Ibn al Assāl who flourished in these periods. One of them was called 'l Šaiḫ 'l Raïs 'bu Isḥaḳ ibn 'l Raïs Faḫr 'l Dawlaṭ Abul Mufaḍḍal ibn 'l Assāl (الشيخ الرئيس أبو اسحق بن الرئيس فخر الدولة ابو المفضل بن العسّال). He was a most copious writer on various subjects—philology, law (ecclesiastical and profane). Those high-sounding titles in Arabic were, however, not long to last. The Copts were soon prevented from using them longer by the very bitter persecutions they suffered from under the Turks and Mameluks.

5. Under the above-mentioned rulers the Copts reverted to their old names, which were a mixture of Arabic and Christian-Greek names, with here and there a few Biblical ones, added to surnames usually denoting son of so and so, or father of so and so. In those times they began to translate many of their old names into Arabic, and used them in their Arabic equivalents. Thus they translated the old name Pshay, ⲡϫⲁⲓ, into عيد 'Eid ; ⲡⲥⲁⲧⲉ, بساته into نور 'Nour'; and also Greek names, Antonius into عوض, Theodorus into عطالله, etc., etc.

6. In our days we can divide up the names into different groups :—

(*a*) Purely Egyptian names still in common use, such as Pakhome = ⲡⲁϧⲱⲙ ; Bishay = ⲡ̀ϣⲁⲓ ; Mena = ⲙⲏⲛⲁ ; Bahman = ⲡⲁϩⲙⲁⲛ ; Besa, Wissa = ⲃⲏⲥⲁ ; Harmin = ϩⲁⲣⲙⲓⲛ ; I have even found Hôr = ϩⲱⲣ, and Paesi = ⲡⲁϩⲥⲓ, and Thaesi = ⲧⲁϩⲥⲓ ; Nesamon = ⲛⲉⲥⲁⲙⲱⲛ ; Besada = ⲡⲥⲁⲧⲉ ; Besenda = ⲡⲉⲥⲥⲉⲛⲧⲉ ; Shenudah = ϣⲉⲛⲟⲩⲧⲉ ; Babnuda = ⲡⲁⲡⲛⲟⲩⲧⲉ ; Toutou = ⲧⲟⲩⲧⲟⲩ ; Loula = ⲗⲟⲩⲗⲁ, etc., etc.

(*b*) Old Greek names, which are very numerous indeed : Butros = Peter ; Bulos = Paul ; Iskander = Alexander ; Giurgius = George ; Tadros = Theodorus, etc.

(*c*) Purely Arabic names, which may be either translations of old Egyptian or Coptic ones, or of an Arabic origin. They may be theophoric names, always added to the name of Allah, such as Abdallah, Gudallah, Attallah, etc., or denoting the attributes of the Almighty, as Aziz, Latif, etc., which are abbreviations of Abdel Aziz and Abdel Latif. Usually Moslems use the full name, and Copts only the attribute. The Copts, as has been said above, have been very careful not to use any name of the Prophet Mohammed, محمد, or any of the derivatives of the word ; nor any name of his family, such as Hasan, Husein, Aly, Othman, or Fatmah, Zenab, Aisha, etc.

(*d*) Mixture of Turkish names and Arabic names, such as all attributes in the form "f'ly" (فَعْلي), Sobhy, Turkish for Sābiḥ in Arabic ; Fahmy, Turkish of Fahîm, and so forth, as Noṣḥy and Nōṣiḥ, Fikry and Fakkir, Sirry and Sarrîr. We often find these forms added to purely Christian names, such as Girgis and Tadros and Butros, or to Biblical names, such as Ibrahim = Abraham, Yusif = Joseph, Isḥāk = Isaac, or even Hazḳial = Ezekiel, and Armiah = Jeremiah, etc.

(*e*) European names added to Arabic, or to Turkish, or even to ancient names of an Egyptian origin. Of Latin names the commonest are Louis, Antoun, Francis, etc., for men, and Louise, Bella—short of Isabella—etc. ; and of English we have from William, Edward, Albert, Herbert, Wilson, Charles, Robert, down to Dickson, Kitchener, even Allenby and Nelson, for men, and from Laura, Lily, Daisy, Eva, Nelly, to Hortense, Edith, Elizabeth, Victoria, Georgette or Georgina, for women.

Thus in the above outline of Coptic names we can easily follow the historical changes in their use, and one can orient himself in a historical sense when faced with any name of the above-mentioned groups.

G. P. G. Sobhy.

JUSTICE AND REVENUE.

Experts	571–582	Other Courts	669–682
Scribes	583–591	Procedure	683–691
Secretaries	592–598	Judges	692–716
Orders	599–608	Declarations	717–734
Judgments	609–617	Registers, records	738–762
Laws	618–621	Police, prisons	763–767
Justices	622–627	Treasury	768–803
Court of Six	628–647	Accounts	804–811
Court of Thirty	648–668	Tribute	813–819

In the management of a country there will always be hard cases and difficult questions, which are above the scope of petty officials, who can only carry on by fixed rules. For these matters there was a special staff of experts (571), *sehez*, " making clear " ; these were organized as a body of referees, as there was a *sehez sehezu* (572), implying that they were not under the authority of the department which they understood, but acted as independently responsible. These experts were attached to the Council of Upper Egypt (573), to the sealers (574), to the country districts, the councils of the *qenbet* (575), and to the Private Secretariate (576). Sometimes a judge, *sȧb*, was an expert where legal training was required, as for secrets (577), for scribes (578), for the scribe of royal documents (579) and for issuing proclamations or public orders (580). There is also named an expert of the register (581) to settle questions of domicile, and an expert of boats (582), the beginning of an Admiralty court.

There were various scribes attached to important affairs, as (583) the " scribe of the books of Horus the strong bull " (the king), and the " scribe of the place of letters " (584) or the archives of correspondence. One true bureaucrat calls himself " scribe of the letters of the office of elders of the king, as is done for official papers in Memphis, place of the throne of the king, in all seats of the scribes," a regular Chancery formula (585). There was an intendant of the royal documents (586), a scribe of documents of the king in the presence (587), a leader or manager of the documents of the South (588), and an intendant controller of the scribes of

References :—B.B.E., Brugsch, Berlin Erklärung. B.Rec., Brugsch, Recueil. B.W., Brugsch, Wörterbuch. C.I., Cat. Inscrip., de Morgan. C.R.T., Capart, Rue des Tombeaux, E.E., Maspero, Études Eg. E.G., Erman Grapow, Handwörterb. H.B., Holmerd and Boeser, Rijks museum. L.E., Denk., Ergänzungsband. L.A.E., Lepsius, Alt-Eg. Elle. L.J., Lisht, Jéquier. M.C.A., Mariette, Cat. Abydos. M.K., Mariette, Karnak. Mon. D., Monuments Divers. Mun.A(ntiquarium). N.Ber., Newberry, Bersheh. P.Ab., Papyrus, Abbott. P.B., Paris Bibliothèque. P.Har., Papyrus, Harris. P.N., Petrie, Naqada. P.P., Pirie Paget, Ptah-hetep. Q.H., Quibell, Hierakonpolis. Q.S., Quibell, Excavations at Saqqara. R.M.H., Rosellini, Mon. Hist. S.I., Sharpe, Inscriptions. T.W., Petrie, Tools and Weapons. VAT(ican). W.D., Weill, Décrets. WR., Wreszinski, Atlas. Also the previous lists in Ancient Egypt, 1924, pp. 112–113 ; 1925, p. 13.

documents (589). A librarian of the king is named (590), *thă* for *thăy*, and one "over the replies" (591). Beside the scribes, who were writing to order, there were many special secretaries, who had probably a good deal of initiative, like our Secretaries of State. For the royal ceremonies there was a secretary of the king's consecration chapel, *duat* (592), a secretary for private interviews (593), a secretary for private hearings (594), a secretary for hearing made alone in the harem (595), a secretary of secrets (596), a secretary of secret speech (597), and a secretary of all secret speech brought from the nomes (598) or reports of spies in the country.

Connected with the old titles "orderer of Nekhen" or of "Pe," *ră*, there appears a controller of all ordering (599), and a judge controller of ordering (600). There are various officials connected with the orders, *uz*, of the king, as an intendant of all the king's orders (601), and of all secret orders of the king (602), an intendant of royal scribes of all spoken orders of the king (603). The earliest of such titles is a secretary (?) of orders (604) in the first dynasty. Nefermaot at Meydum was commander of all the lords, *saru* (605). A very high noble, Methen, was "possessor of the word" (606), probably acting in the king's name, having the king's word for all he did. There was a scribe of commands (607), and a bearer of all words of the king (608), taking orders direct at court.

A very important class of offices belong to judging, *uzo medu*, "dividing words." This was the function of the High Court of Middle Egypt, but never of the king. After the title alone, "divider of words" (609), there is given the name of the court, the *hăyt* abbreviated (610); another court of judgement was the *usekht* in 613. Two general titles are scribe of the controller of judgement (611) and intendant of all judgements (612). There are secretaries of the judgements (614), and of the judgements in yet a third court, the great Court of Middle Egypt (615–6–7), 616 being for secret orders, *medu shetă*.

The laws, *hepu*, are not so often named. They were in the king's charge in his court of the *seh* hall, as in 618, "the intendant of the laws of the good god in the *seh* hall of true judgement." The great vezier Mentuhetep was a "giver of laws" (619), and there are later titles of the intendant of laws and establisher of laws (620–1).

The earliest great title was Controller of the Interior (622) in the Ist dynasty. Rather later the highest official was the head of the royal court of justice, of which the sign was the great gate with a cornice of uraei, the emblem of the royal power of death. He usually was also professionally a judge, *săb*, and the *thăt* or vezier (623). The latter is derived from the view that he was the husband of the country (624). He had also often the old title of "orderer of Nekhen" the primitive capital (625–6). Later the vezierate was separated, and the Chief Justice was only *hertep* . . . "over the court" (627).

The court most often named was the great Court of Six. Whether this refers to six judges in a great court, or in six separate courts, is not quite certain. Erman and Brugsch take the latter view. In favour of six judges forming one court, there was one secretary of judgements and of secrets (640–1) for the six, there was a great one of the Court of Six (637), and there was an "intendant of the six of the great court" (645). There does not seem any reason for six separate courts being all together; while from there being a great Court of Thirty, divided in tens, for Upper Egypt, it is likely that the great Court of Middle Egypt would also be composed of a bench of judges. This court was held at the capital of the XIIth dynasty, Lisht, Athet-taui (628). The six judges would probably represent the

571 V Desh.vii,xii
572 XI L.D.II,149c,e,
573 V M.M.D 19
574 OK M.M.G n
575 XI L.D.II,149c,e,
576 M.M.C 10
577 M.M. C 10 "
578 V L.D.II,46-7
579 V M.M.D 15
580 V L.D.II,43cd
581 V L.D.II, 54
582 IV-V L.D.II,100b
583 XXII P.H. N.N.
584 XXI P.J. N.N.
585 BER 1397
586 XII N.BER.II,p15
587 V L.D.II,46
588 XII N.BER,II, 15
589 V M.M.D 14,19
590 LN, V,I
591 BER.1406
592 IV. L.D.II,30
593 VI.B.G.
594 XII, M.D.p19
595 XXVII L1056
596 M.M.D42
597 M.M.D.41
598 R.D.XI,1
599 M.M. D II
600 M.M.E 10
601 VI.B.G.
602 VI.GRT.17-26
603 M.M.D 9
604 end I R.T.I, xxx
605 D.M.523
606 III L.D.II,3.5.7
607 M.K.C.20059
608 V L.D.II,43d
609 M.M.D 56
610 L.D.II,43c
611 M.M.H 3
612 V D.P.II,vi
613 V S.M.I,xviii
614 IV,V L.D.II,84
615 M.M.E.17
616 M.M.D.1
617 B.A.304 N.N.
618 XIX B.T.V,950
619 M.K. C.20539
620 B.A. 302 N.N.
621 B.A. 302 N.N.
622 I R.T.I,xxi,27 N.N.
623 III P.M.
624 IV L.D.II,15a
625 D.M.539
626 N.D.45 N.N.
627 VI A.S.XV,212
628 B.M.255
629 V.S.U.I,87
630 M.A.F.I,202
631 B.M.1272
632 V S.M.I,7
633 V. L.D.II,43b
634 XI L.D.II,149.ce
635 XII C.I.I.26,186
636 XII L.J.V.99
637 XVIII, N.R.
638 XII N.BER.II.15
639 XVIII
640 B.A.306 N.N.
641 D.M.523
642 V. L.D.II 64
643 IV,V L.D.II,84
644 M.M.E 8
645 XVIII L.R.337
646 XVIII A.S.VII,235
647 MEIR, IV, XV.

six nomes of Middle Egypt ; the full list has seven nomes below Hermopolis, which was the gate of the Thebaid, but Nilopolis was separated later than the XIIth dynasty. The vezier Merruka was in the great Court of Six, commanding the *saru*, lords (629) ; from this it seems that the court consisted of the six lords of the six nomes. This court gave judgements, *uzo medu* (630) ; and the vezier was "making just judgement in the great court" (631). The judge, orderer of Nekhen, was of this court (632). The great vezier Amenemhet—later king—was leader of the great court (634). In the XVIIIth dynasty it was called the *oă* great, instead of *ur* great (636). The great Rekhmara was mayor of the Court of Six (637). There was a secretary of the judgements (641), and another of the secret words (642) or private debate, of the court. There were scribes of the court with a controller (644). In the VIth dynasty a viceroy was in the great court, perhaps to add representation of Memphis (647)

In the South there was the council of the thirty mayors (*ur*). The title *ur*, great, does not refer to the head of the council, as seven veziers who were concerned with the council were none of them *ur res mobăyt* (649) ; each councillor was a mayor, *ur*. The function of the veziers was to be controller of the mayors (660–3). From Hermopolis southward there were fifteen nomes, and so the council of thirty were apparently two from each nome. A curious late title is "Leader going at the side of the thirty" (651), apparently an outside chairman. The "Hearer of the thirty" (652) was no subordinate, but one of the greatest veziers, who made laws ; this implies that he was gracious to them, hearing their representations. The bald title "over the thirty" (653) was also held by a high priest of Hermopolis (silver ring, U.C.) ; it points to a lower prestige, when they were dominated. Beside the thirty we find references to a southern twenty (654–5), and a southern ten (656–63), and also a northern ten (667–8). The latter overlaps the period of the Court of Six and cannot therefore mean ten outside of the region of the thirty ; also it was a title of the prince of Hermopolis at the north end of the thirty. Thus it seems that the thirty were subdivided, from beginning to end of history, into three groups of ten, the north ten Hermopolis to Hypselis, and the south twenty in two groups of (*a*) Aphroditopolis to Dendera, and (*b*) Koptos to Elephantine, the break being between three western nomes and three eastern. Each of these groups had obvious capitals, Siut, Abydos and Thebes. This accords with the "orderer of Nekhen" being one of the mayors of the south twenty (654). There is one mayor (658) who was, *uo*, supreme, in the house of the ten ; this is in the XIXth dynasty, and shows a domination of the council like the later *her*, "over the thirty." The members of the court are figured by a man with a staff, which sign is known both for *sar* and for *semsu*, elder (648, 665, 6, 8) ; by their importance they were probably *saru*, lords, like the great Council of Six. The title "mayor in the house of *saru*" (666) probably refers to the thirty.

It should be observed that these councils of six and of thirty were judicial and deliberative, but they were not legislative, as there is no *upt*, declaration, or document, or letter. A high judge, *uzo medu*, and orders, *medu*, and *săb*, judges, belong to the Court of Six, and orders to the Court of Thirty. [In *Names and Titles*, xxxv, the "*săb er Nekhen ne hat ur*" should read "*săb rekh ne hat ur.*"]

Some light on these courts is given by seeing what offices are associated with them by a single individual. The Court of Six had three royal sealers and three heads over Nekheb, never held by one of the thirty court. The South Court of Thirty had thirteen royal deputies (*tep kher*), thirteen judges conservators of the

river, nine *nes khenti*, seven priests of Neit, eight secretaries of king's orders, six controllers of scribe of requests, five over land of house of life, and orderers of the land, four intendants of the *usekht* court, priests of pyramids, and intendants of declarations, while all these offices were rarely, if ever, held by one of the Court of Six. There was thus much more extensive administration carried on by the South court than by that of the North ; probably more was done by direct action of the king and heads of departments at the palace in the North, but certainly the South court officials carried on a large amount of business.

The *tăt* was a general name for a law court in any important place, as the *tătu* of South and North (669), of the capital (670) or of the land (671). This was also the name of the High Court with the cornice of uraei, known as the " great *tăt* " (672). The *tăt* courts were organized under one administration, as there was a central management of accounts (or of bondmen) named by a scribe (669). This sign ⊂ has here two possible meanings, as in 672 there is " over the scribes of the beings enrolled for the great *tăt* " ; *au hesb* here (672) meaning " bondmen." If the *tăt* had therefore a *corvée* staff, this points to being the authority for canals and irrigation work.

The *qenbet* was another court, of local origin in various places, the members of which were probably the notables of the town. Apparently from among these, representatives met under the vezier, as forming the great *qenbet*. The term is literally the " corner " man, and suggests that they came from the outlying corners of the nomes, as stated in 673, a " *qenbet* of the *u* land," or agricultural region. There was also a *qenbet* of a temple to deal with agricultural rights (Hepzefa III). They were thus very different from the great men of the cities, the mayors and *saru* lords. In the great *qenbet* they attended to inheritance of land, and sent a *qenbeti* to divide property. The registers of past taxation and ownership were produced before the vezier in the great *qenbet* (Alan Gardiner, *Inscription of Mes*). The court met in the judgement hall of Pharaoh. The great *qenbet* of the North met at Heliopolis, that of the South at Thebes. The choice of Heliopolis suggests that it was a prehistoric court of the old principate there. There was a head man (674) of the local *qenbet*, and an expert of the *qenbetu* (675). In Thebes we read of a follower of the *qenbet* (676), probably to attend to enforcing the decisions of the great *qenbet*.

The *orryt* was another office, of which there was an intendant (677–8), a legate (679), and a follower (680). There was a town near Beni Hasan named Oryt, where Hathor was worshipped (B. Bh. II, 27) ; *orryt* or *oryt* is a " tower," and *ort* a " book roll." Putting these together it looks as if *oryt* was the record-office of a nome, the *oryt* where the *ort* were kept. This happened to be a shrine of Hathor in one place ; the officials were caretakers, *mer*, a legate to inspect the system, and a field-man, *shemsu*, to collect the documents. There is no suggestion of an acting body of people. Two other expressions for legal courts are the " place of justice," *bu măot* (681) and the " hall of justice " (682).

To sum up the conclusions about these various courts. The king sat in the *usekht* hall (73), in the *seh* hall (618), and with the *zazat* council (M.M. B 16) ; as he legislated, but did not judge, these were for *hepu*, laws. The Court of Six was under the vezier (629, 634, 5, 6, 8, 9), and similarly the Court of Thirty (648, 51, 57, 58, 61, 62, 66), giving *uzo medu*, judgements on cases. The *hayt* court was that of elders (*semsu*, see G.W.T. 147 ; A.S. xvii, 92), and was probably a local court like the modern *meglis*. The *tăt* courts managed the *corvèe* for public works (669, 672), probably local courts (669–71), with the great *tăt* (672) over them.

Similarly the *qenbet* courts were local courts, with a great *qenbet* over them, for land laws and inheritance; hence the large estates of the temples needed a *qenbet* of the temple to manage them, and to be trustee for endowments from land. The *orryt* was the record office of the nome, where the *ort* were kept.

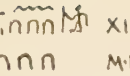
Some officials are named in the procedure. There were "clerks of requests," *sesh speru* (683); such were under a controller (684), and supervised by an expert (685). After the plaintiff had his process stated, there was a hearer who sat in the *usekht* hall (687), who only sometimes acted alone, "hearer of hearings alone" (688–9), and therefore more usually jointly. The phrase "hearing of calls to him" may be merely proof of condescension, or be a legal term for opening cases. *Sedem* "hearing" was evidently a legal term, as there is one "great in hearing," and a scribe of hearing (691–2).

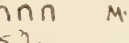
The *sȧb*, jackal, was the usual title for a learned man, not necessarily legal, as he filled many kinds of offices, including at first the maintenance of the waterways (692). The origin of using the sign of a jackal is suggested by the same sign having the meaning of traversing or pulling through difficulties. As the jackal works out the best track through the unexpected intricacies of desert valleys, so a judge has to find a clear track through the unexpected pitfalls of a case. Anyone who has walked the desert knows the immense detours needed to pass the head of valleys, and the bar of unexpected ravines, fit emblems of legal troubles, where only the guidance of the jackal track can show the way.

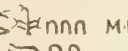
The examples of the title are placed together to show how varied were the functions of a *sȧb*. There is the conservancy of waterways (692), especially of the southern throne (693); the orderer of Nekhen (694–5), judge in the Council of Thirty (696), in the southern cities (697), as an elder of the *hayt* hall (698), and hearing hearings, or taking depositions, there (699). The judges sat in the Treasury of the Aten (700), perhaps owing to insufficient official quarters in the new capital. A *sȧb* was a general of archers (701), another in the place (702), or in the private chamber (*qȧt uo*) of the king (703), or filling the heart of the king (704), or over the orders of the king (705); another was attached to the high-priestess (706), or to the decoration of the tomb, the "house of gold" (707). The *sȧb* had authority as declaring affairs (708), as orderer (709), or strong of speech (710); he was an "expert, scribe of justice" (711, 714), or skilful scribe (713). Judges also gave opinions in writing (715). The bare title *sȧb* (716) is very usual down to the end.

We now turn to the work of Justice, and the first term to notice is *upt* (717). As this word, like many others, has been variously translated—judgement, message, order, or business—we must look for its real definition. It does not occur in the titles belonging to the Court of Six, or the Court of Thirty, nor the *tȧt* hall, nor with any experts, nor council (*zȧzȧt*); in only one case was an *upt* issued by a judge, and a judge named with *upt* is one that decides about its meaning, but not ordering it. The place where *upt* appears is in the heading of records (Sinai) *nesut upt* (717–8), and the name for the census list of a household which had to be declared to the court. Thus it seems entirely clear of judging or deciding a matter. It appears to mean an official declaration or notification; thus it was like a legal declaration now, apart from any matter of justice or dispute. The term "declaration" will best agree with this, and also cover any cases (if such can be found) where it involves a decision on a question. In Sinai the official decrees for the expeditions are headed *upt* (717) or, "declaration of Horus lord of the palace" (718). There was an intendant of all declarations by the king (719–20)

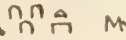
648 XIX B.T. V,950

649  M.K. C. 20037

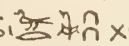
650  M.K. P.S. 31

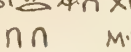
651  XX D.D. 25339

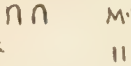
652 M.K. C. 20539

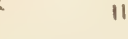
653  XXVI A.S. XVII,31

654 XIII

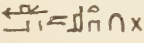
655  M.K. P.S. 303

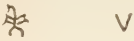
656  III L.D. II, 3.5.7

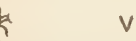
657  V D.P. II.

658  XIX M.Ab. II, 56

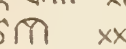
659 V L.D. II, 61a

660  V P.P. 38-9

661  XIX L.D. III, 132n

662  XXVI REC. IX, 59

663 M.K. C. 20628

664  V.L. 248

665 M.K. P.S. 79

666 XX D.O. 25339

667 XVIII L.R. 104

668 XI N. BER. II. 5

669 B.M. CONE 9639

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671

672 XXII P.H. N.N.

673 P.S. 86, 114

674 MK. C. 20434

675 XI L.D. II, 149ce

676 A.S. VI. 75

677 VI D.G. II, xii

678 XII N.Bh. 1, 16

679 M.K. C. 20435

680 M.K. C. 20659

681 A.S. XV, 215

682 E.E. 348

683 M.M.D 23

684 V L.D. II, 46

685 V L.D. II, 43c

686 XVIII L.R. 175

687 XVIII L.R. 314

688 A.S. XI. 19

689 B.M. E. I. 102, A. 3 N.N.

690 M.K. C. 20087

691 P. C. 27

692 III M.M.A. 1

693 V L.D. II, 45-8

694 IV S.M.I., pl. II

695 XIX B.T. V, 950

696 M.K. P.S. 31

697 A.S. III, 103

698 V P.P. 35

699 M.K. C. 20017

700 V. 53

701 A.S. XIV 31-5 N.N.

702 A.S. IV, 209

703 P.S. 31

704 XI L.D. II. 149, ce.

705 XIX P. Ab. II, 37

706 A.S. IV, 134

707 M.K. C. 20457

708 XVIII ZAS XXI, 127

709 V D.P. II, 8

710 III L.D. II, 5

711 V M.M.D. 10

712 XVIII S.B.A. 1889, 103

713 A.S. VIII, 273

714 V M.M.D 10

715 V L.D. II, 43b

716 O.K. SIN. 16, XXVI B.M. 1225

717 SIN. 13, 16, 17 } ORDERS FOR EXPEDITN

718 SIN. 25 }

719 V M.M.D 19

720 (399) A.S. XVII, 134

721 V P.G. 7a

722 V. L.D. II, 88a

723 XIX B.T. V, 950

724 VI L.D. II, 111d, i

725 III L.D. II, 3, b

726 " " " "

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728 M.K. C. 20015

729 XIX L. APIS

730 V P.G. 7a

731 D.M. 524

732 V M.M.D 10

733 VI C.R.T. 17-26

734 V. 19

735 XIX L.D. III, 132n

736 A.S. XV. 212

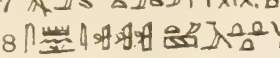
or of the palace (721); or over the declarations in the land to its limits (722), or to both lands (723), or in the nine nomes (724), probably from Memphis to Siut, or in nomes separately (725–6–7). In one case there were declarations by a judge (730); one was over declarations of secret things (731), or of Justice (732); the declarer of truth (735) was probably the one who had to pronounce the verdict, by turning his figure of Măot toward the acquitted party. The secretary of clear voicing (736) was perhaps for public proclamation.

Registration was all-important in Egypt, down to every infant. Registers of persons served to distinguish freemen from slaves, as by the "intendant of the things sealed" (737). The usual sign for a register is the roll of papyrus tied up, or a bundle of rolls. This sign has had many renderings, but essentially it is a register, or applied to registered things or persons, or a registrar or registry. It is most clearly defined by the title of the great vezier Mentuhetep, "establishing the registers of the boundary (*tăshă*) of land, declaring the assignment (*kherpet*) as far as his neighbour" (738). The earliest figure is of a bundle of rolls, the register of food in the North office (739). The green colour points to the vegetable origin, like green rope signs, though they were in use certainly brown. A general in the Ist dynasty (Sin. Ib) and the great prince Rahetep, were registrars of the *saru*, or the elders (748), also intendants of the registers (741). There were controllers (742), or overseers (743), or chiefs of registers (745). The king's registry is named (744, 746). A man was said to be "entered in the registry" (747). There was an intendant of the double registry of documents under the king's seal (748), and an intendant of the registry of executions (?) (749). People were "in the register" (750, 752, 753); a keeper of the registry appears (751), and even a tomb was known as a registered place, like our word billet meaning a position to be occupied, though literally the paper order for it (*see* 754, 755), "building his registered place, raising his tomb." Other documentary titles were of one "in the place of documents" (756), keeper of documents (757), and one "over the declarations" (758) (see *yă*, "certainly, assuredly"). There is a group of officials of the *deqernu*, which seems to be equal to the Hebrew דכרון, *dekerun* "records." This is twice found in the Vth dynasty, so it is an original Semitism, and not late. There was an intendant of the office of records (759), an inspector, a keeper and a servant (*ahems*) of the office (760–2).

The intendants of police are named in 763–4, *khu* "to protect," implying police or guards. Scribes of the prison or "lock-up" appear in 765–6; and a mayor of the prison, later, in 767.

The treasury was always an important department, yet it was not held by more than half the early veziers, and scarcely by any later veziers. There are few officials named, and never any secretary, till one in the XIXth dynasty. Thus there was but little correspondence, the department being simply for storage of precious metals. The titles are not fully determined; Maspero took the *per hez*, or white house, to mean any plastered government office; on the other hand, silver is now read simply as *hez*, with the *nub* sign as determinative of precious metal. Hence the *per hez* may well mean the store of silver. When a high official, or a vezier, is called intendant of the *perui hez*, it is clearly an important office, and should be taken as the silver treasury; this covers many other cases. There is one possibility, that the treasury was always built of stone, to prevent burglary, and hence that the white stone house had this meaning, in contrast to other houses of brick. Sometimes there is the double house of gold (768–9), doubled for Upper and Lower Egypt. The two *per hez* in 771 should refer to silver, as the double house

737 XIX. B·A·254 N·N·

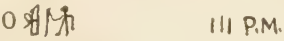
738 

739 M·K·C·20539

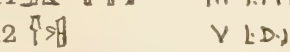
II R·T·II,xxiii 192-3 202 N N

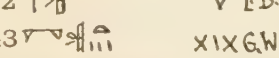
740 III P.M.XIII

741 III P.M·ix,xii

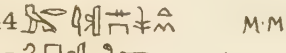
742  V L·D·II,54

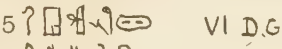
743 XIX G.W.T. 216

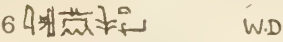
744  M·M·D·25

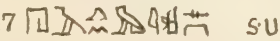
745  VI D.G.I,xvii

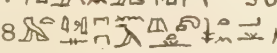
746 W.D·19 N.N.

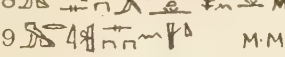
747  S·U·I,135

748  M·M·D19

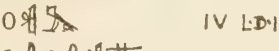
749  M·M·D6

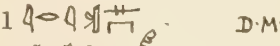
750  IV L·D·II,15a,b

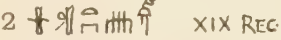
751  D·M·527·

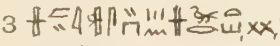
752  XIX REC·X,130

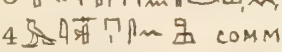
753 XX,D025339

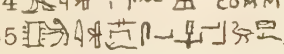
754  COMMON PHRASE

755  S·U·II,162

756  Ro. B·A·222 N·N·

757  L·N·82

758  XIX B.M.703

759  V·118

760 MUN·A·24

761 M·K· V. 72

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763 XII N.Bh.I,16

764 VI A·S·XII, 97

765 M·K· C·20322

766 M·K·C·20476

767 XVIII L·R·56

768 V S·M·VIII

769 XVIII N.R.

770 V. L·D·II,45-8

771

772 XVIII SBA1889,103

773 XII REC·X,144

774 XXII P.H. N.N.

775 B·M·STAT·603

776 P.J. 465 N.N.

777 B.M·212

778 M·M·D25

779 P.S. 20–147

780 SIN. 28

781 SIN·25

782 M·M· F1

783 E·E·248

784 P.S·298

785 L·D·III,240

786 V. M·M·D6

787 B·M·

788 C· L·512

789 VI A·S·XV, 214

790 XIX B·REC·II,74

791 V S·M·I, vii

792 SIN·85

793 A·S· VIII, 65

794 M·M·D25

795 P.G· vii A

796 EE 248

797 M·M· D11

798 I R·T·I·XXIII 40 N·N·

799 M·K· C· 20399

800 SIN·112

801 NICHOLSON STELE

802 MK C·20079

803 MK C·20080

804 XVIII P·S·CONE 74

805 XIX, ST·25

806 A·S·VI,91

807 B·M·826

808 S·I· II, 1, 21

809 P. 26

810 XVIII S·B·A xxii 32

811 XXVI, A·S· IV, 183

812 VI MEIR IV, xv

813 II R·T· II·XXII, 184 N·N·

814 II R·T·II, XXII 181 N·N·

815 P.S· 286

816 XXII P.H. N·N·

817 XXII P·H· N·N·

818 B.M·

819 B·M·

of gold follows. If so, 770, 772 will refer to silver, yet in 774 *perui hez* simply means treasury, as it follows "of silver (*nub* det.) and gold." In 775 the question arises, when the two signs were united, if the alloy of silver and gold, or electrum, is intended. In 776 gold is named before silver, and there can be no doubt about both metals. In 777–9 the diwan of the treasury is named, the clerk's office. An elder (780) and a keeper (781) appear. The palace intendant of the storehouse, or strong room, for gold, is named (782), and the expert about things of the treasury (783), also a scribe (784). The administrator of the western treasury of the palace shows that a separate treasury was on the western side (785). The depot, *khă*, of gold of the king seems separate from the official treasury (786). The gold for the room of gold implies the store for the gilding of the tomb (787), and the same is implied by the treasury of the Duat (788). Secretary and scribes of the treasury are often named (790–1–2). A counter or reckoner of the treasury was employed to tally the amounts (793), and a junior was "in the following of the treasury" (794). An unusual title is "orderer of things for the treasury" (795). A curious idiom in 796–7 is "under making sound," fit, or healthy, similar to our "*under*taking"; perhaps the nearest equivalent would be "organizer." A helper, *kher-o*, in the treasury of Sez-hetep in the Ist dynasty is the earliest treasury title (798). In 799 is a rare title, "the careful sealer of the treasury" (*khetmu kefă ab*), parallel to a "careful sealer controller of works" (Vienna 31). The guard is written phonetically, *său*, in 800. There were special boats and crews belonging to the treasury, for conveyance of valuables; a sailor of the department has left a stele (801), and a guarded ship brought washed gold from Nubia (B.A. 242).

Accounts were the principal care of clerks, as seen in the long lists of farm property stated in the tombs, and the summaries of booty from the wars, whether of the Ist or the XVIIIth dynasty. The idea of complete registration and record seemed a first principle to the Egyptian mind. There is only one grade of accountant of the treasury (802). Of accounting in general there is an expert keeper of accounts (803), a scribe of accounts of the king (804), a scribe of accounts of silver and gold of the king in the South and North (805), and a scribe of royal accounts (806). The day-book system was separate, as there is a scribe of accounts every day in South and North (807), and a royal scribe of daily accounts (808). Another scribe was an able chief accountant (809). A control of the temples is shown by an intendant of the reckoning of the temple accounts (810), and the form of the word *rău per* suggests that the temple was so called as "the house of words," of the service of the god. The queen had a secretary of accounts of the pure place (817). A noble's establishment employed two or three men entitled "expert orderer of things," a sort of handy man to tidy up affairs (812).

The tribute from abroad was always an important aid to the country, and in decadent times the poor produce of the oases was ironically called a blessing. In the IInd dynasty the sealer of the tribute of the North is named (813), and also the tribute of the Asiastics (814). Later there is a manager of the tribute (815), and the list at the close of the empire names a scribe of the increase (816), and an expert scribe of increase (817), the increase being reaped as taxes for the king. An over-keeper of the balance, and a keeper of the *mokhu* balance (818, 819), were the people who had to verify all the tribute, as is often represented in the XVIIIth dynasty.

FLINDERS PETRIE.

REVIEWS.

Hermetica. By Walter Scott. Vol. I. 8vo. 549 pp. 1924. (Oxford, Clarendon Press.) 30*s.*

At last we have a critical edition of "the ancient Greek and Latin writings which contain religious or philosophical teachings ascribed to Hermes Trismegistus," as the full title states. The present volume is to be followed by vols. II and III of Commentary, and vol. IV of Testimonia, Appendices and Indices. The state of the text is unhappy, as the MSS. of one half are all derived from a single late Byzantine MS. (the Asclepius in Latin depends on a single archetype, which was corrupt) and the remainder is built up out of extracts made by John of Stobi, which need extensive critical rearrangement, so that page after page is cut up by transpositions. No doubt the Commentary of the next two volumes will give the reasoned method which has led the present editor. Throughout there is the Greek or Latin original on the left page, and a translation opposite to it, while abundant footnotes give various readings and notes. For all this, students will be thankful.

The most important question about these writings is the date of their original composition, as on that turns their relation to the history of ideas, before or after Christianity. This date is placed by Prof. Scott certainly after the Ist cent. A.D., and mostly between 200 and 310 A.D. The ground for this is the assumption that these works are Greek productions, that they contain dogmas derived from Greek philosophy, and show a mixture of Stoic physics and Platonism. But all the imagery of these works is Egyptian, and Libellus XVI states "the style is obscure . . . and it will be thought still more obscure in time to come, when the Greeks think fit to translate these writings from our tongue into theirs. Translation will greatly distort the sense of the writings. . . . In our native [Egyptian] language the teaching conveys its meaning clearly. . . . When the Egyptian words are spoken, the force of the things signified works in them. . . . Keep the teaching untranslated . . . that the Greek mode of speech with its arrogance and feebleness and showy tricks of style may not reduce to impotence the impressive strength of the language. . . . The speech of the Greeks is devoid of power to convince; and the Greek philosophy is nothing but a noise of talk." Yet we are asked to assume that this was composed in Greek, based upon Platonism, and is to be judged by the history of Greek philosophy. So far as there is common ground between the Hermetic writers and Plato, there is nothing to prove that Plato's residence at Heliopolis, to learn from Egyptian philosophers, is not the connecting link of these documents with Greece. Further, this particular treatise is addressed to an Egyptian king, Ammon, and there was no native king following the Egyptian religion since Nekht-hor-heb, "the approved of Ammon," and he was six centuries before the date desired by Prof. Scott. Can we imagine anyone reviving the idea of such a dialogue after all the changes of Ptolemaic and Roman rule?

It has been pointed out, many years ago, that there are several definite historical marks in these works. Only one of these is discussed by Prof. Scott, the celebrated passage about the destruction of Egyptian worships and despoiling

the country. This he endeavours to fix to the Palmyrene invasion of Egypt, 269–271 A.D. Yet no explanation can be given of the definite terms "Scythian" and "Indian" for invaders, and the papyri—which abound in that century—show no trace of a violent suppression of the religion. As for danger to it from Christians, they had been slaughtered and forced to apostatize wholesale a few years before, from Decius to Valerian, and were after that in a state of violent disruption, so that no obvious danger would come from them. But when we refer this description to the only history with which it agrees, the Persian attack under Ochus, 342–339 B.C., the explanation is complete. The Indians and Scythians were regular troops in the Persian army and have left their effigies in Egypt; Ochus killed the Sacred Apis and placed an ass to be worshipped in the Temple of Ptah; the other sacred animals were killed, the temples looted, the walls of the cities destroyed, and every Egyptian who held to the native rule was slain.

This is only one of the data. There is elsewhere the statement that speech, as an image of mind, is "the same in Egypt, Persia and Greece." Could any one sum up the civilised languages in that way in the close of the IIIrd century A.D., when Rome had long been dominant? Again, there is the reference to a good satrap being sent to govern a conquered province; who would write that, when no satrap had been seen in the West for many centuries? That allusion has an exact historic foundation at 518 B.C. under Cyrus.

Beside such definite historic landmarks, there is the general question of ideas, on which Prof. Scott relies by trusting to their development in Greece. There is the gradual growth of the Logos doctrine; according to the historic detail, about 350 B.C. Logos is the human soul; in 330 B.C. Logos is Reason to be adored; next, Logos makes all things; then Logos is divine indwelling by the Son of God; in 40 B.C. Logos is the first-born Son who made all things, and by the end of the Ist century A.D. the gospel states that the Logos was God and all things were made by him. Can we suppose that the first stages here were all much later than the last, and came centuries after Philo and St. John?

Further, Prof. Scott is emphatic that there is no trace of Christian influence on the Hermetic books, but, if anything, that Christian teaching was borrowed from the Hermetics. There is also no trace of Rome or Roman civilisation or law, but, on the contrary, a recognition of the civilisation of Persia. There is animal worship in full force, in the Hermetics, and it is given as "the reason why the cities of Egypt are wont to make war on one another." Yet animal worship had greatly decayed, and Isis and Horus were the main deities of the Roman age; moreover, no such religious feuds between cities had then occurred for some centuries. Again, there is noted an absence of all ritual and sacramentalism, the religious ideas were in a plastic and vivid state, while under Rome all was decadent and formalised.

As early as Plutarch, the habit of word-twisting and etymologising was growing, and was a ruling idea in later times; yet it is entirely absent in the Hermetic books. The reliance on amulets and charms was the main feature of religion in the later centuries, yet the Hermetic writers are quite free from it. The Font or Basin of Mind, in which men were to dip to receive mind, and so become complete men, is imagery belonging to the earlier baptism of John for the Descent of the Spirit, and has no part in the post-Christian notion of baptism to wash away sin. In these, and other ways, we see how a late date for these writings would imply a reversal of the known course of thought, whereas the dates between

500 and 200 B.C. place them in their natural position in development. We are assured by Prof. Scott that in these books there is hardly anything which is of Egyptian origin. We have so little of philosophical literature left from Egypt that it is difficult to compare Egyptian origins. But we read "Righteousness is cast out, iniquity is in the midst of the council hall, the plans of the gods are violated, all men alike are under wrongs, as for respect an end is made of it. Darkness will be preferred to light, and death will be thought more profitable than life, the pious will be deemed insane, and the impious wise; the madman will be thought a brave man, and the wicked will be esteemed as good, and so the gods will depart from mankind. The peaceful face is wretched, the good is disregarded in every place." There seems but little difference in character between these passages, yet they are compiled from (1) an old Egyptian writing of the Middle Kingdom, (2) the Hermetic passage beginning at "Darkness," and again (3) the old Egyptian in the last sentence. We read of Thoth knowing and seeing all that passes, and men being punished on earth, or, if not, in heaven, and of all the good that comes from the water of Thoth—which is the water of life—in a tomb of the IIIrd cent. B.C.; like those who have "dipped themselves in the bath of Mind . . . and so become complete men," in Libellus IV. The Egyptian reasoned that "It is the tongue which repeats the thought of the heart; it (the heart) is the former of all gods . . . at the time when every hieroglyph even came into existence, as a thought of the heart which the tongue commanded," and so the Hermetic reasoned, "Speech then is an image of mind, and mind is an image of God . . . mind deals with soul, soul deals with air [breath], and air deals with gross matter." The concord of physical action and moral sense is splendidly set out in the great hymn of Akhenaten, and was familiar to the Egyptian as it was in later times to the Greek.

The Indian influence on Hermetic writing is seen in doctrines such as those of rebirth and introspection; this can hardly have been brought in except when the Indians accompanied the Persian army. In the Mahabharata Adi Parva is seen a dogma of the soul closely akin to the Hermetic; some souls dwell for 60,000 years, some 80,000, in heaven, and then they fall . . . the being becomes a subtil substance . . . in which is the seed of vitality, and entering trees, plants, etc., becomes of quadrupedal and bipedal forms. Similarly, in Isis to Horus (excerpt xxvi), souls which have discernment enter human bodies, others bird bodies or quadrupeds, or reptiles; the most timid enter fish bodies. The Indian said that the virtùous attain to a superior, the vicious to an inferior, form of existence, and so in the Kore Kosmou those who erred slightly should be greeted again in their home above, while sinners were condemned to be beasts.

In the whole of this Hermetic imagery and ideas there is a simplicity and a splendid tone which would be inconceivable in the decadent word-splitting age of the disruption of the Empire, or of Heliodorus or Julian. When we rid our minds of the misconception that the Hermetic books are a part of Greek philosophy, which they detest, and see that they belong to those lines of Egyptian and Indian thought which were borrowed by Pythagoras and Plato, the earlier date under the Persian dominion puts all the details in their historic position, and unifies these works with the development of dogma seen in pre-Christian centuries.

Since the above was written, we hear of the sudden death of Prof. Walter Scott, which will be greatly regretted by all who are interested in these enquiries. It is to be hoped that the promised volumes, which should complete this work, have been left in such a form that the value of his researches will not be lost.

The Gospel of St. John according to the earliest Coptic manuscript. Edited by Sir HERBERT THOMPSON. 4to. xxx and 70 pp. 43 pls. (British School of Archaeology in Egypt, and Quaritch.) 1924. 25*s*.

This papyrus, found two years ago at Hamamieh, has here been exhaustively studied and published. After an account of the discovery, the nature of the manuscript, its date, peculiarities of the text, the dialect, and general conclusions, there is a detailed statement of the evidence on the condition of the Greek text which underlies this version. The papyrus is issued in photograph on forty-three plates, each containing the two sides of one leaf, and facing each is the text in Coptic print. At the end is the Coptic glossary, and a list of foreign words. Lastly comes an English literal translation of the Coptic. The very early date of this copy, only exceeded by the Vatican Greek MS., renders it one of the most valuable authorities for the original text. The British School is indeed fortunate in being able to entrust so important a publication to an editor whose care is worthy of it. The volume has already reached all guinea subscribers to the School to whom it was due.

Ancient Egypt, sources of information in the New York Public Library. By IDA A. PRATT. 8vo. 485 pp. (New York Public Library.) 1925.

This catalogue gives a very extensive bibliography of works on ancient Egypt, fully classified in detail, and will therefore be an aid to study. Beside the subject list there is an authors' index, giving the title of every book, article, or paper published. Maspero comes out first in the number of his entries, though he wrote few volumes. The Library is very complete in works of the last fifty years, and the gaps are in the older literature. There is no entry of Rifaud, Stobart, Minutoli, Paul Lucas or Prosper Alpinus; nor under the authors is there Wilkinson's *Architecture,* Loftie's *Ride in Egypt,* Petrie's *Sinai,* or Athanasi's *Researches.*

Ancient Egyptian Works of Art. By ARTHUR WEIGALL. 4to. 354 pp. 1924. (Fisher Unwin.) £3 3*s*.

A collection of 270 pages of excellent photographs of Egyptian art is sure to be welcome, and the quality of the reproductions is worthy of such a volume. The question of selection for an anthology is always difficult, but at least the most important subjects should be included. The Gebel Arak knife-handle is the foundation-stone of art in Egypt, the gazelle palette is the earliest of such artistic work, the head of Khufu is one of the finest character portraits, but none of these are included. Ranefer is the noblest statue of an official, but the plate is gloomy and ineffectual. Other first-class subjects are not found here, such as the Zet stele, Pepy-ha-shetef statue, glass mosaic of Dahshur, Lahun pectoral or Horemheb's Memphite tomb. What is really needed is a more select series of all the first-class work of each age.

The author, on the ground of long experience, claims a certain pontifical attitude of judgement, but it is hard to reconcile this with the exclusion of the wooden statue (p. 42) and Ranefer head (p. 47) from his list of the finest work. Nor is it possible for any one with a sense of portraiture to agree in placing entirely divergent heads to Amenemhat III, or to Akhenaten. The publisher scarcely follows the usual amenities. One quarter has been added to the weight of the volume by blank pages, of which there are seventy; there is not any statement of sources of the illustrations, and though many of them are copyright there is no acknowledgement, nor note of permission to use the labour of others.

Early Hebrew History. By HAROLD M. WIENER. Sm. 8vo. 117 pp. 1924. (Robert Scott.)

The studies in this volume point out the changes in law and ideas, and the ethical principles in different periods. There are the two opposing tendencies, one of religious separation, which enforced national unity, and the opposite centrifugal tendency of nomadic tribalism, which broke up into small groups. An enlightening examination of the additional passages about Jeroboam in the Septuagint explains various difficulties in the present Hebrew text, and renders the politics of the division of the kingdom more intelligible.

Another chapter deals with the Law of Change, showing how various ordinances were successively adapted to the historical conditions. The instances of provision for changes are discussed, and the various steps throughout the theocracy, the kingdom and the return. After this, the different kinds of responsibility are disentangled with legal insight, the joint responsibility as one of a community, the hereditary result as in a family, and the individual choice. It is pointed out how new conditions, acting on the past, produce a joint result different from either element—the moral resultant. The long-distant results of a single choice by a people or person are dwelt on, noting how one decision carries forward a chain of history, and discussing the cases of collective and vicarious punishment. It is refreshing to meet such a close criticism and insight, free from the arbitrary assumptions and misreadings so frequent elsewhere; it should be read by any one who wishes to understand the Law and the Prophets.

JOURNALS.

Comptes Rendus, August–October, 1924.

Excavations are continuing in the Hauran at Sheykh Saad, by Prof. HROZNY. The remains are Amorite, influenced by Babylonian and Hittite connections. The so-called Job stone proves to be a stele of Ramessu II, dedicated to the local god. We must congratulate the Czecho-Slovak Government on showing more enterprise than our own.

Prof. JÉQUIER discusses the *sekhem* and its meaning. In the Pyramid texts there is "the sekhem of which the name is 'Joy of Heart,' and which on the north of the Sekhet Aălu is set up" for the deceased king. The sign is said to bear equally the names of *aba*, *kherp*, *hu*, and *sekhem*, only the *sekhem* is distinguished by two eyes, showing that it has a divine life. It appears in the Book of the Dead (Any, CLI) on the north side of the sepulchre, with the couchant jackal, as also on coffins and steles. It is also the subject of the scenes in the temple of Sety at Abydos, and it may be a primitive cult object of Khentamenti.

The cemetery of Sidon at Kafr Gerra is now being cleared, yielding bronze weapons, alabaster vases and blue-glazed vases, pottery and cylinder seals, of about the XVIIIth dynasty.

A law for excavations has been decreed, and the excavator may have a part of his discoveries, but only of such objects as are similar or equivalent to those already in the Syrian museums. Apparently any number of museums are to be supplied before anything is allowed to go elsewhere. This is expected "to have the happiest consequences on the development of research." Excavators may well think otherwise.

M. Lacau gives his annual statement of work of his department in Egypt. The ruins of the church of St. Menas have been repaired where necessary. Some tombs have been cleared east of the pyramid of Khufu, disclosing a fine granite sarcophagus of house-form, with a panther skin carved on the roof-lid. A great variety of tomb plans of the IVth and Vth dynasties, between the Khafra pyramid and the Sphinx, show how variable the type was in one age, somewhat like the great variation of type in the Ist and IInd dynasties at Bashkatib. At Abydos it has been needful to place a pent roof projecting from the walls to screen the sculptures from rains. At Karnak the Xth pylon has been restored; the temple of Amenhetep II has been cleared and restored, and it proves to have been built out of an earlier work of the same king, confirming the long reign stated in history. In the IIIrd pylon there is more alabaster of Amenhetep I and Tehutmes I (over three-quarters of their chapel is recovered), also more red sandstone of the Tehutmes chapel of Hatshepsut—over 114 blocks are now known, and the colours are intact, having been walled up. At Saqqarah, beside Mr. Firth's work, Mr. Gunn and Mr. Dunham, Prof. Jéquier and M. Kuentz, are working at the Mastabat Fara'un, and toward Dahshur. The very interesting results of the clearance of the chapels of the IIIrd dynasty have appeared in illustrated papers recently, and the interior of the Step pyramid proves to contain many inscribed vase fragments of the two previous dynasties.

Zeitschrift für Ägyptische Sprache. Vol. LIX, part 2, 1924.

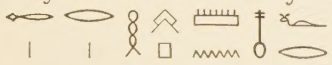
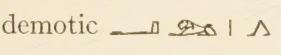
Sethe, K.—*Die Sprüche für das Kennen der Seelen der heiligen Orte.* In this article, Sethe finishes his exhaustive study of the group of chapters in the Book of the Dead for "knowing the souls of sacred places." The first part of this treatise was published in *Zeitschrift*, LVII, 1922 (*A.E.* 1923, part I). Chapters 108, 111, and 149*d* are dealt with in this portion of the paper; they are concerned with the "Souls of the West." One M.K. title, "Not to die by a snake," shows that Chapter 108 was considered efficacious against snake bites.

Anthes, Rudolf.—*Die zeitliche Ansetzung des Fürsten Nḫrj I vom Hasengau.* This article is an attempt to date *Nḫry* I of the Hare nome by a consideration of his titles in the graffiti of Hatnub. Some of these titles are exceedingly rare, and seem to denote very special services rendered to the Heracleopolitan king in his struggle against Thebes. The writer concludes that the graffiti throw light on a stage in the struggle hitherto unknown, in which the Thebans had penetrated northwards beyond Siut into the Hare nome. He considers, therefore, that *Nḫry* I lived in the decades immediately preceding the XIIth dynasty, and thus reaches a conclusion which confirms Möller's identification of *K*^{3}*y*, son of *Nḫry*, with *K*^{3}*y*, grandfather of Amen-em-hat.

Wolf, Walther.—*Vorläufer der Reformation Echnatons.* In the opinion of the writer of the article, the Reformation was entirely the work of Akhenaten, though he appropriated and utilised ideas which were already familiar.

Bonnet, Hans.—*Zur Herkunft der sogenannten Tell el-Jahudiye-Vasen.* Though the material available is insufficient for settling the question with certainty, Bonnet considers that the actual country of origin of the Tell-el-Yahûdîyah ware must be sought in Nearer Asia, probably Syria. He holds that Junker's attribution to Nubia is entirely without foundation. Junker (*Sitzungsber. der Ak. der Wissensch. in Wien*, 198, *Band*, 3, *Abhdlg.*) attributes their distribution to Nubian

mercenaries who were, he assumes, in the service of the Hyksos and were established by them throughout the country. He assumes, further, that the pots were prized for their own sake, and excludes the likelihood that they were merely containers for some costly export commodity such as oil, for which their small capacity and long, slender necks made them particularly suitable.

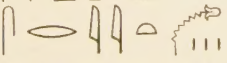
Spiegelberg, W.—*Der gegenwärtige Stand und die nächsten Aufgaben der demotischen Forschung.* This article is a review of results achieved and work still to be done in demotic research. [Since this article appeared, Spiegelberg has published a demotic grammar.] The importance of a dictionary (for which he has the material ready in the rough) is demonstrated by the help given by demotic in solving the meaning of Egyptian words and phrases. The advantages which would accrue from a compilation of theophorous proper names may be illustrated by the following example:—the late hieroglyphic name  was unintelligible until it was found to be identical with the demotic  *'l = w Ḥ p r Mn-nfr*, which means "Apis has been brought for burial to Memphis."

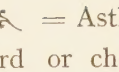
Spiegelberg claims that recent research has proved demotic to vie with the earlier forms of the language in literary interest. He refutes any lingering scepticism regarding the accuracy obtainable in translating it by quoting a recent translation of Brit. Mus. Pap. 274. This papyrus proved to be partly a literal translation and partly a paraphrase in Greek of the demotic Leyden Pap. I, 384, which Spiegelberg translated and expounded some years earlier. The Greek papyrus confirmed his rendering to the hilt.

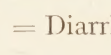
Keimer, Ludwig.—*Die Pflanze des Gottes Min.* To the many riddles connected with the representations of Min and of Amon belongs the object described hitherto as a small tree growing on a support. The writer shows that the "tree" is the Egyptian lettuce (*Lactuca sativa*, L.) and that the support represents a field of lettuces divided into square beds. It is suggested that the milky sap of the plant may have some bearing on its connection with Min and later with Amon. From the New Kingdom onwards, *'bw* determined by a picture of the plant is the word for lettuce. Until it can be proved beyond doubt that the plant or its sap was used as an aphrodisiac, the translation of *'bw* by "an aphrodisiac" in Erman and Grapow's Dictionary should be used with caution.

Ebbell, B.—*Die ägyptischen Krankheitsnamen.* The first part of this article appeared in *Zeitschrift*, LIX, part I. In this section the writer proposes the following identifications:—

4. = Teething trouble. The remedy is cooked mouse.

5.  = Coughs. It is remarkable that no portion of the Ebers Papyrus deals with chest complaints as such. A considerable section containing thirty prescriptions deals for the most part with *śryt*. The writer suggests that the Egyptians did not differentiate between chest complaints, but used the general term *śryt*, meaning coughs, for all or several of them. Greek and Roman medical works devote whole chapters to coughs. The treatment for *śryt* is inhaling, and the remedies are honey, cream and caraway seeds, all of which are recommended by Dioscorides for coughs.

6.  = Asthma (?). The only clue to this illness is the determinative, a lizard or chamæleon. The latter animal emits a curious noise when perturbed, very much like that of asthmatical breathing. [Perhaps modern Egyptian *kuhha*, cough.]

7.  = Diarrhœa, or something similar. Castor-oil seeds are prescribed, also cooked ox blood. Dioscorides prescribes the cooked blood of certain animals for diarrhœa and dysentery, and castor oil is still used for these complaints.

8. = *ḥumāq* (?). The London Medical Papyrus contains "a charm in Beduin speech" against this illness. The name is obviously a foreign word, and may be derived from the Arabic *ḥāmaq*, an illness which is frequently mentioned by Arab writers. The disease seems to be a fever accompanied by a rash.

Spiegelberg, W.—*Der böse Blick im altägyptischen Glauben.* Proper names, particularly women's names, are the best evidence for the belief in the power of the evil eye in Egypt. Spiegelberg traces the name *St₃-ir.t-bin.t* from Saïte to Coptic times, translates it as "God N. removes (or tears out) the evil eye," and considers it to be of kindred meaning to *Ḥdb Nt* (or *Ḥnsw*) *ir.t bin.t* "Neit (or Khonsu) kills the evil eye." He cannot find any trace of this belief before the Saïte period.

Kees, H.—*Der Name des Suchosheiligtums von Illahun.* In *Zeitschrift*, LIX, part I, Scharff read , the name of a sanctuary of Sebek, as *r-ḥn.t* Illahun. Kees now shows the true reading to be *r-sh.wy*, "Opening of the two halls," on the evidence of an unpublished fragment in the Cairo Museum, where the titulary Sebek lord of *r-sḥ.wy* is written out in full. This inscription is behind Sebek lord of *grgw-b₃.f* (known from the Pyramid texts to be the name of the Busiris sanctuary of Osiris) and faces Sebek lord of Crocodilopolis and Sebek lord of Busiris. These titles point to a cult of the crocodile at Busiris which has passed without notice hitherto.

MISCELLANEA.

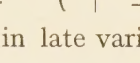
Sethe, K.—*Nochmals zum ägyptischen Namen von Byblos.* The name "Mistress of Byblos" for a member of a seafaring family confirms Sethe's connection of the words for sea-going craft (*kbn.t, kbny.t, kpnw.t*) with the Egyptian name for Byblos.

Till, W.—*Zu* n.nk tm—"*mir gehört das All.*" In disagreement with Sethe (*Zeitschrift*, LIV), the first *n* is taken to be the Nisbe form of the preposition.

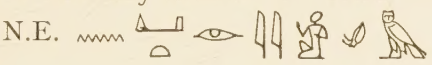
Wolf, W.—*Amenhotep, Vizekönig von Nubien.* The writer dates Amenhotep, viceroy of Kush (known from the Sehel graffito) to the time of Thothmes IV by identifying him with the royal son Amenhotep who dedicated a stele to this king at Wadi Halfa. Both inscriptions contain similar titles, particularly "overseer of the cattle of Amen," a title which is unique amongst viceroys.

Bissing, Fr. W. v.—*Zur ägyptischen Pflanzensäule.* A Hathor capital in Cyprus of about 500 B.C. is clearly derived from an Egyptian prototype. The head

of the goddess surmounts a cluster of papyrus flowers so that the pillar is comparable with the columns of Nectanebo at Philæ. Further confirmation is thus added to the theory for the use of the Egyptian "bouquet" pillar in pre-Ptolemaic times.

SPIEGELBERG, W.—*Zu* R3-s't3.w  "*Nekropolis.*" In the use of the sign *t3w* "wind" in late variants of this word, Spiegelberg sees an attempt to give the vocalisation.

SPIEGELBERG, W.— dd mdw *im Koptischen.* The writer now derives ⲭⲉⲩⲧⲁⲩ from *dd mdw,* so that the noun ⲧⲁⲩ from which he derived the word (*Koptisches Handwörterbuch,* p. 156) is required no longer.

SPIEGELBERG, W.—*Der Ursprung des Finalis* ⲛ̄ⲧⲁⲣⲉ, ⲧⲁⲣⲉ. In the ⲧ Spiegelberg sees a survival of *dy.t* "to give," and regards *n dy.t* as the infinitive following the genitive preposition *n* meaning "for the purpose of." Thus ⲛ̄ⲧⲁⲣⲓ ⲥⲱⲧⲙ̄ actually means "in order to give so that I hear" and corresponds with N.E.  *n dy.t ỉry-y stm.*

WIESMANN, H.—ⲭⲉ *zur Einleitung der Apposition.* Instances are given of the use of ⲭⲉ before appellatives in apposition.

WIESMANN, H.—*Das Geschlecht von* ϩⲟⲉⲓⲧⲉ *Kleid.* Further examples are given to show that this word may be feminine in gender.

WIESMANN, H.—*Verwechselung von* ϩⲏⲧ (*Herz*) *mit* ϩⲏ (*Bauch*). Passages are quoted in which the Coptic word for "heart" is used instead of the word for "stomach."

WIESMANN, H.—*Der Artikel bei* ⲟⲩⲉⲣⲏⲧⲉ. Wiesmann detects a lack of precision in Spiegelberg's remarks on this word in his *Koptische Handwörterbuch,* as the singular seems to be not uncommon and the plural article is generally ⲛ.

WIESMANN, H.—*Bemerkenswerter Gebrauch von* ϩⲛ. The writer draws attention to a peculiar use of this preposition.

L. B. E.

NOTES AND NEWS.

SUBSCRIBERS to ANCIENT EGYPT may become Associates of the British School of Archaeology in Egypt by contributing 10*s.* per annum, which entitles them to receive the journal quarterly, post free, and to receive notices and other privileges of Members. This course was suggested by one of the subscribers, and those who have already sent in 7*s.* can become Associates on sending 3*s.* in addition. It is hoped to have a gathering in the Edwards Library in the autumn.

Excavations of the British School.

The work of the British School this season has been almost entirely on the remains of the earliest civilization, the Badarian. Miss CATON-THOMPSON, accompanied by Miss Hughes, made the first scientific search of the sites at the north of the Fayum. The position is difficult for work, as the water supply has to be brought fifteen miles. Several early settlements were found, some of them with five feet depth of remains. The flint sites extend far below the level reached by the lake in late Egyptian times. It seems that they must belong to an age long before the Nile deposits had raised the level of the Nile, and of the lake which it fed. This implies an age of at least 13000 B.C. for the Badarian culture. A large number of flint axes, knives, arrow points and other forms have been obtained from fixed levels, so the history of this age should soon be fairly settled. At Badari, south of Asyut, Miss Caton-Thompson continued to excavate the settlement, and recovered more of the prehistoric series. Mr. and Mrs. BRUNTON resumed excavation of the Cemetery at Badari in January, finding beadwork on leather belts, fine linen, ivory spoons, and good flint knives. Unhappily the work was shortened by Mr. Brunton's illness.

The exhibition will be held during the three whole weeks of July 6th to 25th and on the evenings of the 15th and 25th. Associates of the British School will be received at the private view on the 3rd and 4th July, 10—5.

Discoveries at Saqqara and Gizeh.

At last the Department of Antiquities has begun to excavate the sites which all Egyptologists have been waiting half a century to be explored. The shrine of the step pyramid of king Zeser shows that as early as the third dynasty there were fluted columns, and also foliage capitals and papyrus capitals. The rapid growth of this architecture within fifty years after the rude brick and stone sepulchre of Khosekhemui raises a most important question in the history of artistic development.

The sensational discovery of a pyramid site and great tomb at Gizeh, with the name of Sneferu on the lid of the coffin, must await future work to explain the nature of the burial. It is so far untouched, and has been walled up until Dr. Reisner can develop this result of his excavations.

Mr. Carter has been steadily clearing up the great mass of discoveries already removed from the tomb of Tutankhamen, preparatory to dealing next season with the sarcophagus and two untouched chambers.